

**Students for Fair Admissions, Inc. vs. The University of NC Chapel Hill, et al.  
Richard Kahlenberg on 07/11/2018**

1 holistic admissions, and there are other universities  
2 that use a percentage plan. I'm not aware of any that  
3 have combined those two.

4 Q. And the other schools you mention use class rank  
5 in their percentage plan. Correct?

6 A. That's correct.

7 Q. And then on page 76 you reference the -- you use  
8 the phrase: "The model I asked Arcidiacono to employ."  
9 You say, the fourth line from the bottom: "Unlike UNC  
10 simulation however, the model I asked Arcidiacono to  
11 employ does not rank admitted students solely by a  
12 single factor." And focusing on the words, "the model I  
13 asked Arcidiacono to employ", did that refer to a model  
14 that he had already constructed and you asked him to  
15 use, or did you direct him to create that model?

16 A. Well, this is a new model in the sense that  
17 Professor Arcidiacono did not on his own do a 4.5  
18 percent plan using the holistic admissions. But it  
19 piggybacks off of Professor professor's model that looks  
20 at what predicts admissions through the holistic process  
21 at UNC.

22 Q. What, if anything, did you do to verify that the

1 model was working as intended?

2 MR. STRAWBRIDGE: Object to the form of the  
3 question.

4 MR. FITZGERALD: Let me rephrase it.

5 BY MR. FITZGERALD:

6 Q. What did you do, if anything, to verify that the  
7 simulation was working as intended?

8 MR. STRAWBRIDGE: Same objection.

9 A. We would have discussions about how the numbers  
10 were being run. And I would write up the results of the  
11 simulation, describing how the simulation was conducted.  
12 And there was an opportunity for Professor Arcidiacono  
13 to at that point notify me if there was any deviation  
14 from what I had intended and what I was describing in my  
15 report, and what he had actually done.

16 BY MR. FITZGERALD:

17 Q. So maybe I'll break it into three parts: If you  
18 describe what he had done, you would write it up and  
19 Professor Arcidiacono would see that and have an  
20 opportunity to correct you if you mis-described what you  
21 asked him to do. Correct?

22 A. That's correct.

1       Q. And when you gave the results and you summarized  
2       them -- and we'll go through that in a moment -- if he  
3       thought you summarized the results incorrectly, he had  
4       an opportunity to tell you your summary is off.

5       Correct?

6       A. That the description of what he had done was off.  
7       Yes.

8       Q. And what about the description of the results,  
9       what the outcomes of the simulation were. Did he review  
10      your description of those?

11      A. Yes.

12      Q. What, if anything, did you do to ask him whether  
13      or not there were any statistical issues in the  
14      simulations he performed; whether or not the model, for  
15      example, he used -- was overfit or not?

16      A. I did not ask him about whether the model was  
17      overfit. Because Professor Arcidiacono is more highly  
18      trained in those issues. I asked him to provide a  
19      simulation that would be the strongest possible from an  
20      econometric standpoint, and relied on him to ensure that  
21      he was avoiding issues like overfit.

22      Q. And what do you mean by "strongest possible

1 model"?

2 A. That is to say that using his many years of  
3 experience in constructing models and conducting  
4 simulations, that this would be the -- that he would  
5 employ the best techniques available.

6 Q. So to follow up on that point of view, turn to  
7 page 78. You'll see the chart at the top of the page  
8 that's titled "UNC admitted classes of 2019, paren,  
9 in-state admissions, post-paren." How did that chart  
10 get created?

11 A. I created this chart.

12 Q. So what information did Professor Arcidiacono  
13 give you from the simulations that allowed you to create  
14 this chart?

15 A. Well, he would provide a spreadsheet of the  
16 results of the simulation, and then I would create a  
17 chart that would express the results in a user-friendly  
18 fashion.

19 Q. What did the chart that he gave you look like?  
20 What kind of format was it?

21 A. An Excel spreadsheet.

22 Q. How long would it take you to take his Excel

1 spreadsheet and turn it into something like the chart at  
2 the top of page 78?

3 A. It wouldn't take long.

4 Q. Just for my understanding, when you look at the  
5 first entry that says: "White, 69.2 percent", is that a  
6 number that would be lifted off his Excel chart or is  
7 that a number that you yourself would calculate?

8 A. That would be from his Excel.

9 Q. And how did you calculate SES disadvantage, which  
10 is the sixth item down in the left column?

11 A. So I want to be careful here, because different  
12 simulations had slightly different definitions. So I  
13 want to make sure I'm accurately describing this. I  
14 don't see a discussion in the report. But I can tell  
15 you at a high level that the definition of socioeconomic  
16 disadvantage in many of the simulations involved whether  
17 a student was eligible for a fee waiver; whether she was  
18 first-generation college; and whether she was eligible  
19 for free-introduced-price lunch. That's the family --  
20 at an even higher level I should say, socioeconomic  
21 disadvantage here is the socioeconomic disadvantage of  
22 the family, as opposed to the neighborhood or the high

1 school.

2 Q. And do you know if the definition used for the  
3 chart on page 78 for SES disadvantaged is reflected in  
4 your report or in your work papers?

5 A. It would surely be in the work papers.

6 Q. And same question as to the definition of SES  
7 advantaged?

8 A. The SES advantaged is a figure that is calculated  
9 by subtracting socioeconomic disadvantage from a hundred  
10 percent. So it's any student who is not  
11 socioeconomically disadvantaged.

12 Q. Do you know how the SAT and the high school GPA  
13 were calculated in the last column?

14 A. Yes. So these are the mean scores of the  
15 population being discussed here, in-state students.

16 Q. And do you know if those metrics for SAT and GPA  
17 are weighted in any way?

18 A. I mean, the GPA is above 4, so it has a weighting  
19 under UNC's system.

20 Q. Do you know if the SAT score here is weighted in  
21 any way?

22 A. I'm not aware.

1       Q. Is there anything we could check to find out  
2 whether the SAT score is weighted, that would be in your  
3 work papers?

4       A. That would be presumably in the work papers. And  
5 then the simulation 5 is one that we subsequently  
6 corrected. But that information would be in the work  
7 papers.

8       Q. Who would have made the decision whether or not  
9 to weight the SAT in the simulation?

10       A. That would have been a decision that Professor  
11 Arcidiacono would have made.

12       Q. And the same thing as to GPA?

13       A. Yes. High-level instructions would be to provide  
14 the most accurate representation of the data. And given  
15 his familiarity with the various ways in which the data  
16 could be presented, I relied on his expertise to make a  
17 decision on the most accurate way to present his data.

18       Q. Once you made that high-level direction, the  
19 decision whether to weight the SAT or GPA and how much  
20 to weight it, would be entrusted to Professor  
21 Arcidiacono?

22       A. That's correct.

1       Q. Who created the backup to your reports for the  
2 simulations?

3                    MR. STRAWBRIDGE: Object to the form of the  
4 question.

5       A. I did not. Do you mean the appendices, or the  
6 work --

7 BY MR. FITZGERALD:

8       Q. The work papers.

9       A. I was not involved in that.

10      Q. Would that be Professor Arcidiacono who did that?

11      A. I assume so. Because I wasn't involved in  
12 creating that, I don't know from personal knowledge who  
13 exactly created those work papers.

14      Q. If it wasn't Professor Arcidiacono, who would it  
15 have been?

16      A. He worked with a team of individuals whom he  
17 supervised.

18      Q. So whoever it was, it wasn't you. It was either  
19 Professor Arcidiacono or people working under him?

20      A. That's correct.

21      Q. And did you have any impute into the models he  
22 constructed, Professor Arcidiacono, with respect to

1 admissions in the world of race within that process?

2 MR. STRAWBRIDGE: Object to the form of the  
3 question.

4 A. No. I would ask him for things like: "I'd like  
5 to have an understanding of how heavily different  
6 factors are weighted in the process." But he's the one  
7 who designed all those models.

8 BY MR. FITZGERALD:

9 Q. When it came to the choice, such as whether or  
10 not to use a Logit model, L-O-G-I-T, or Probit model,  
11 P-R-O-B-I-T -- was that his decision or your decision?

12 A. His decision.

13 Q. And do you know what Professor Arcidiacono does  
14 within the models with when there's an SAT score  
15 missing?

16 A. At a very high level, I know that he imputes the  
17 missing variables, as is common in studies like this.

18 Q. Do you know what process he uses to impute the  
19 missing variable?

20 A. Again, at a very high level -- he would be able  
21 to answer this much better than me. It's my  
22 understanding that He looks at the other variables that

1 are likely to predict SAT score -- or the missing  
2 variable, let's say SAT --

3 Q. And do you personally know what risks there are  
4 in using that method to impute a variable based upon  
5 other variables?

6 A. I know there's discussion in his report about  
7 different ways of imputing the missing variables. But I  
8 wouldn't claim to have the expertise that he has in that  
9 area.

10 Q. And the decision to do that, would that have been  
11 Professor Arcidiacono's as opposed to yours?

12 A. To impute the missing variables?

13 Q. Yes.

14 A. Well my high-level instruction would be that the  
15 efforts should be race-neutral. And then he would make  
16 the decision on the best way to implement the model in a  
17 fashion that's race-neutral and that addresses the  
18 common problem in these types of simulations, that some  
19 variables are missing.

20 Q. So once you gave him the high-level direction to  
21 implement that model, would he come back to you and  
22 discuss with you, "Here's how I intend to deal with

1 missing variables." Or would you basically have  
2 delegated that choice to him?

3 A. Well, given his extensive experience in this  
4 area, I would delegate that to him.

5 Q. Do you know how Professor Arcidiacono  
6 standardizes SAT scores?

7 A. I don't.

8 Q. And there's a program, I'll spell the name out  
9 for you and for the Court Reporter. But it's a  
10 Kahlenberg, K-A-H-L-E-N-B-E-R-G underscore race-neutral  
11 model dot DO program. Are you familiar with that?

12 A. I'm not.

13 Q. And do you know if that's the underlying model  
14 that is used to run all those simulations off of?

15 A. The name is suggestive. But I don't -- I haven't  
16 looked at that model.

17 Q. Do you know what it means to allow variables to  
18 interact with each other from a statistical standpoint?

19 A. Yes.

20 Q. What does it mean?

21 A. When you're looking at a number of variables in  
22 an equation, one might want to know, for example, how an

- 1 SES preference applies differently to different races.
- 2 And so the interaction between socioeconomic status and
- 3 race would be an example of looking at that question.

4       Q. So from a statistical or econometric point of  
5       view, do you know what the risks and benefits are of  
6       allowing different variables to interact with each  
7       other?

10       A. Again, I asked Professor Arcidiacono to provide  
11       his best judgment on the best way to conduct a  
12       race-neutral alternative. And given his extensive  
13       experience, that's something I deferred to him on.

14 BY MR FITZGERALD:

15 Q. And the model, as run in your January report, was  
16 run on only UNC applicants. Correct?

17 A That's correct. In all of those, right.

18 Q. And it was used to calculate status quo results.  
19 Correct?

20 A Yes

21 Q. Whose decision was it to run the model only  
22 against applicants in January?

1       A. That was my decision.

2       Q. Why did you decide to do it that way?

3       A. Well, a number of reasons: The biggest reason is  
4       that when you focus on applicants you have the actual  
5       rating system that UNC employs. And in the past there's  
6       been a criticism of race-neutral simulations because  
7       individuals will say, "Well, this doesn't look at the  
8       letters of recommendation and the interviews and the  
9       essay, and all the various factors that go into an  
10      admissions process that would rely on SAT's and GPA's  
11      and all the objective factors." And so it was my belief  
12      that a race-neutral alternative would be more powerful  
13      if it could use applicant data, and have therefore  
14      available to it the actual ratings that UNC had  
15      employed. It would be the closest thing to holistic  
16      admissions. So that was one advantage.

17           A second advantage has to do with the breadth of  
18      the simulation. So in my opening report, Professor  
19      Arcidiacono and I were able to project the entire UNC  
20      admitted class, a hundred percent of students; whereas  
21      if you rely on -- as Professor Hawksby did on the RNC  
22      data -- you're limited to about two thirds of the class

1 details about the most accurate way to do that, I would  
2 leave to him.

3 Q. Do you know if he compared applicants across  
4 years? In other words, did he have applicants in one  
5 admission cycle compete only against applicants in that  
6 same cycle? Or did he combine years and have applicants  
7 as a whole -- as a pool -- compete against the other  
8 applicants?

9 A. I know the results are presented in terms of  
10 annual results. But in terms of -- you're talking about  
11 the composite number?

12 Q. Yes. His methodology. Did he have 2016 and 2017  
13 applicants treated similarly? Or did he treat 2016  
14 applicants separate in a pool for just that year, and  
15 then treat 2017 applicants in a pool for just that year?

16 A. Again, I asked him to present the data in the  
17 most accurate way possible, and then left the judgment  
18 to him for the best way to do that.

19 Q. As you sit here now, do you know which way he did  
20 it?

21 A. I well, I know when we looked at the -- if I'm  
22 understanding your question right -- when we look at the

1       results, they're broken down by year and then there's a  
2       composite at the very end, a total that would combine  
3       those --

4           Q. You're pointing to, for the record?

5           A. I'm not sure I'm on the right page here.

6           Q. We were on page 65. I didn't know you were  
7       pointing to a chart.

8           A. Yes, I was. I just flipped very quickly, so I  
9       want to make sure I have the right one. Appendix C. I  
10      remember there was a page where he puts it all together,  
11      82/18 split. So first he's presenting in state and the  
12      out of state -- so here it is, table C2.

13           Q. Just for the record, there's no page number, but  
14      I think table C2 is unique. Table C2 is 2 pages. So  
15      table C2 and table C2 continued. Do I have that right,  
16      from Exhibit 1?

17           A. That's correct.

18           Q. Your understanding what this reflects here is a  
19      year-by-year breakdown of the status quo and the admits  
20      on the simulation?

21           A. That's correct.

22           Q. Who constructed table C2?

1       A. Professor Arcidiacono.

2       Q. Did you edit it in any way?

3       A. It's possible. In our process, he and his team  
4       would provide the results, and I would suggest to him,  
5       "Well, I think it would be clearer if we did it this  
6       way." So it's possible I edited this.

7       Q. As you sit here now, do you recall whether you  
8       edited this table or not?

9       A. I don't recall.

10       Q. As you sit here now, do you know if in running  
11       this simulation Professor Arcidiacono had the applicants  
12       in 2016 sort of compete only against the other  
13       applicants in 2016, or against the other applicants  
14       across 2016 and 2017? If you know.

15                    MR. STRAWBRIDGE: Object to the form of the  
16       question.

17       A. So I would assume that they were completing  
18       within each class.

19       BY MR. FITZGERALD:

20       Q. And in your January simulations -- in appendix C,  
21       are all the tables from Professor Arcidiacono?

22       A. Yes.

1       Q. In your January report, did you identify high  
2 schools to determine the number of 12th-grade students  
3 within high school?

4       A. I'm trying to remember whether we did a school.  
5 I remember we were seeking to get the level of school --  
6 diversity by number of schools; that was one of the  
7 things I asked for.

8       Q. During that process, was a variable used called,  
9 quote -- I'll spell it -- S-C-H-L-C-O-D-E, close quote.  
10 Are you familiar with that variable?

11       A. At a high level it's my understanding there was a  
12 -- yes, that was one of the issues that came up.

13       Q. Was it a 3-digit code, as far as you recall?

14       A. I was not involved in looking at the numbers --  
15 digits.

16       Q. Was that number involved to identify the SES  
17 school variable? If you know.

18       A. So again, my understanding is at a high level,  
19 that there was an error made in the way that schools  
20 were coded -- or schools were analyzed in the original  
21 simulations that we had been -- that Professor  
22 Arcidiacono subsequently fixed --

1       Q. So before we get to the error and the fixing, did  
2 you understand that the purpose of the school code  
3 variable was to identify schools where preference would  
4 be given to applicants from that school because of the  
5 SES characteristics of the school?

6       A. It depended on the simulation. It's my  
7 understanding the school code would be implicated in the  
8 socioeconomic preference issue, to look at the  
9 socioeconomic status of the school, but also indicated  
10 in the percentage-plan approach which relies on being  
11 the top students within a particular school.

12       Q. Who created this SES school variable?

13       A. I gave a high-level instruction to provide a  
14 preference to students who attended socioeconomically  
15 disadvantaged schools, given the extensive research  
16 suggesting that the obstacle that students face when  
17 they enter a high-poverty school, or lower-income  
18 school. And this was one of those instances where there  
19 was a back and forth between Professor Arcidiacono and I  
20 about the data that are available in the case and how we  
21 could best define socioeconomically disadvantaged  
22 schools.

1 Q. Do you remember what the back and forth was?

2 When you say "back and forth", was it a disagreement  
3 between the two of you? Just a --

4 A. No. Just an iterative conversation about how to  
5 do this most accurately.

6 Q. And who decided how to construct that variable in  
7 the end?

8 A. I would decide in the end. I mean, Professor  
9 Arcidiacono would give me options, and then I would make  
10 a decision on what made most sense.

11 Q. And what made most sense in this case?

12 A. In this case, I think we ended up saying it would  
13 be students who were from the bottom third  
14 socioeconomically -- I mean, the school was in the  
15 bottom third socioeconomically.

16 Q. Do tables C 1, C2, and C3 in your January report  
17 reflect the use of that SES school variable?

18 A. Well, it would depend on the simulation. So  
19 Simulation 1 doesn't look at the school's socioeconomic  
20 status. Simulation 2 doesn't either. Simulation 3 does  
21 not implicate schools. It's when you get to simulations  
22 4 and 5 where the school issue comes up.

1       Q. And did you understand that school code variable  
2 to identify a unique high school for each member?

3       A. So I wasn't involved in that question. I just  
4 provided instruction about the school; what I was  
5 looking for, and then Professor Arcidiacono was the one  
6 who then went into the data and looked at the school  
7 variables.

8       Q. As you sit here now, do you know if now your  
9 models, including any corrections you made, happen that  
10 the school variable is unique to one school?

11       A. I think I better -- let me say again: At a high  
12 level, Professor Arcidiacono would be in a better  
13 position to answer that question. What I sought to have  
14 him do was to correct the error that Professor Hawksby  
15 had identified in our initial use of school codes, and  
16 have it reflect what I was seeking, which was that each  
17 school would have a unique code.

18       Q. So what happened when Professor Hawksby  
19 identified the error? What did you do to figure out  
20 whether her criticism was correct or not?

21       A. Professor Arcidiacono and I had a conversation  
22 about the question of whether the school coding was done

1 accurately. And he examined the issue and found this  
2 was an instance where Professor Hawksby was correct. So  
3 I instructed him to rerun the numbers with the correct  
4 definition of schools.

5 Q. Did Professor Arcidiacono walk you through how  
6 the mistake was made, or did you just trust his judgment  
7 when he agreed with Professor Hawksby?

8 A. He's a leading economist, and this is not my  
9 particular area of expertise, sorting through code. So  
10 I relied on his expertise.

11 Q. On your January report on pages 33 to 34, you  
12 discuss the Logit estimates of admission calculated by  
13 Professor Arcidiacono as "mild". Are you on page 32?  
14 Counsel as well?

15 What do you understand that the Logit estimate of  
16 admission tells you?

17 A. It tells you the increased -- or decreased, in  
18 the case of a negative -- chance of admissions based on  
19 that one particular variable.

20 Q. And do you intend to opine at trial about the  
21 significance of a Logit estimate and what it means?

22 A. Well, in explaining the meaning in my report, I

1   would feel comfortable at a high level of discussing  
2   what a table like this means.

3       Q. And when you say "what a table like this means",  
4   what are you referring to?

5       A. I'm sorry. On page 33, you pointed to in-state  
6   applicants, the Logit application estimate.

7       Q. Oh, you're on 33. Okay, got it. I was wondering  
8   why your page and mine look different; they were  
9   different pages. What is your understanding this table  
10   tells you, based on the Logit estimates?

11       A. Well, that all other things being equal, an  
12   African American student's odds of admissions are 4.687  
13   times the odds of a non-African-American -- or white  
14   student in this case. And a legacy student has a 4.35  
15   times odds of admissions of a non-legacy student.

16       Q. Have you ever testified before about the  
17   significance of a Logit estimate in any other  
18   proceeding?

19       A. I have not.

20       Q. Do you know how Professor Arcidiacono's models  
21   that were used for your simulations, compare to the  
22   model used by Carnevalie in the study that you cite --

1 on page 12 of the January report, if you need that.

2 MR. STRAWBRIDGE: Object to the form of the  
3 question.

4 A. I mean, there would be lots of differences  
5 between the models. Professor Carnevalie, for example,  
6 didn't have access to the holistic ratings that  
7 Professor Arcidiacono was able to employ in his model.

8 BY MR. FITZGERALD:

9 Q. Do you know of other differences between the two  
10 models?

11 A. Well, there may be other differences. I think  
12 that's probably the most significant one.

13 Q. And turning to page 77, same report, footnote  
14 292.

15 A. Yes.

16 Q. Do you understand that Professor Arcidiacono used  
17 all the possible variables from UNC in his models?

18 MR. STRAWBRIDGE: Object to the form of the  
19 question.

20 A. I just want to read this footnote to make sure I  
21 follow the question.

22 I'm sorry. I lost your question.

1 Q. The footnote may be distracting from the  
2 question, so pretend I didn't put that shiny object in  
3 front of your eyes. Do you understand whether Professor  
4 Arcidiacono used all of the variables provided by UNC in  
5 constructing his model?

6 MR. STRAWBRIDGE: Same objection.

7 A. It's my understanding that Professor Arcidiacono  
8 was trying to replicate a holistic admissions that would  
9 look at the different types of ratings that UNC used in  
10 its system. And then would turn off various preferences  
11 that I asked him to erase; like legacy and the like.

12 BY MR FITZGERALD:

13 Q. Do you know if Professor Arcidiacono omitted any  
14 of the UNC variables in his model, setting aside  
15 whatever you asked him to turn off?

16 A. All I know is that I asked Professor Arcidiacono  
17 to replicate as closely as possible the current  
18 holistic-admissions process in the race-neutral  
19 simulations

20 Q. You don't know whether he included all variables  
21 that Carolina had or not. Is that fair to say?

22 A. All I know is the instructions I gave to him. I

1 don't know about the specifics about his decisions to  
2 omit certain variables that he thought would be  
3 inappropriate to include in the model.

4 Q. And you had no discussions with him as to whether  
5 or not any variables were ones that would be  
6 inappropriate to include in the model. Correct?

7 MR. STRAWBRIDGE: Object to the form of the  
8 question.

9 A. No. I mean, my instructions were: "Try to  
10 replicate as best as possible the holistic-admissions  
11 process with only these variations -- legacy, that kind  
12 of thing."

13 Q. And you had no further discussions with him, as  
14 to any decisions he made to include or omit variables in  
15 his judgment?

16 A. That's correct.

17 Q. In your April report -- so we're going to switch  
18 reports to Exhibit 2. Before I cite you something, I'll  
19 make sure it's a productive exercise.

20 MR. STRAWBRIDGE: I won't hold you to that,  
21 Counsel.

22 BY MR. FITZGERALD:

1       Q. And in the context, what do you understand "rare"  
2 to mean?

3       A. Well, Professor Hawksby's report, in her footnote  
4 she talks about the chances of -- kind of what Professor  
5 Arcidiacono explained to me was kind of the more  
6 accurate way of describing "increased chances". And yet  
7 in her text she used this 21.2 percent chance of  
8 admission. So that was the initial flag for the idea  
9 there was a concern here. And then in the next sentence  
10 I go on to say: "The immediate admission probability  
11 for a socioeconomically disadvantaged student or for a  
12 family and neighborhood bump is just 2.7 percent."  
13 Which gives you -- that's the median -- and so suggests  
14 the 21.2 percent chance is not typical.

15       Q. And is the information that Professor Arcidiacono  
16 provided to you reflected anywhere in your work papers  
17 or appendix?

18       A. I assume it's in the work papers, yes.

19       Q. You assume. Do you know, or do you just assume?

20       A. I haven't seen the work papers, so I don't know.

21       Q. Who prepared the work papers?

22       A. Professor Arcidiacono.

1 Q. Have you ever seen them?

2 A. I've seen the results of various simulations, but  
3 I haven't seen the work -- all the coding that's  
4 provided, I haven't gotten to that.

5 Q. So you haven't seen any of the work papers that  
6 underlie the analysis in your report?

7 MR. STRAWBRIDGE: Object to the form of the  
8 question.

9 A. So we had a division of duties in our process,  
10 and I would provide instructions for how I would like  
11 the simulation to be conducted. Professor Arcidiacono  
12 has far more expertise than I do on how to run models,  
13 and so I didn't think it was -- it didn't make sense for  
14 me to get into those -- to take close examination of the  
15 work papers.

16 (Whereupon the proceedings go off the record.)

17 BY MR. FITZGERALD:

18 Q. So Mr. Kahlenberg, you used non-applicant data in  
19 your June reply report. Correct?

20 A. In some of the simulations, yes.

21 Q. And you'd agree with me that a large number of  
22 non-applicants are eligible for socioeconomic

1 doesn't go into -- so at a high level, it was the top  
2 students in the NCERDC data, by the metrics of SAT and  
3 GPA -- I want to get the precise description that I --

4 Q. If you look at page 59, at the end of the first  
5 -- the carry-over paragraph, it says: "I asked  
6 Arcidiacono in Simulation 8, to fill vacant seats with  
7 the top remaining students --

8 A. Oh, yes, akin to an academic index, yes --

9 Q. -- and focused on academic factors such as grades  
10 and test scores." And then there's footnote 220.

11 A. Yes.

12 Q. Do you know, did Arcidiacono use his own academic  
13 index, if you know?

14 A. So the reason that we use the word "akin" to the  
15 academic index is that we weren't using the academic  
16 index per se. The academic index, it was in essence the  
17 academic index but not the academic index per se. So it  
18 was turning off all these various preferences in model  
19 4, which in effect leaves over SAT and GPA as what  
20 remains when you take out all these other factors.

21 Q. How is that different from Arcidiacono's academic  
22 index?

1       A. My sense is that, given that this is using model  
2       4 and then turning off the other preferences, I believe  
3       that it could include the academic rating, looking at  
4       the program rating. But I'd have to look at the model  
5       4; I don't know if you have that report, Arcidiacono's  
6       report --

7       Q. Let me ask you this question: Who decided to do  
8       it this way?

9       A. I deferred that question to Professor  
10      Arcidiacono. That is to say, I wanted to admit -- the  
11      high-level instruction was, I wanted to admit the top  
12      students apart from -- with all these other preferences  
13      turned off. And the way it was explained to me is this  
14      is akin to the academic index but not the academic  
15      index.

16      Q. Do you recall if there was any discussion about  
17      the advantages and disadvantages of doing it this way  
18      versus using the academic index?

19      A. I don't, no.

20      Q. And then Simulation 9, how did you complete the  
21      class for Simulation 9? It's in page 62 of your reply  
22      report.